

WHAT IS CLAIMED IS:

1. A stator of an alternating current motor, the stator comprising:

a yoke (10) having an outer annular member (11) and an inner annular member (12) integrally formed therewith, two winding slots (13) symmetrically defined at two opposite lateral sides between the outer and inner annular members (11, 12), and two cut-outs (14) symmetrically defined at two opposite sides of the outer annular member (11) and respectively communicating with middle positions of the winding slots (13);

upper and lower insulators (20, 21) respectively assembled on upper and lower ends of the yoke (10), and respectively having two outer rings (201, 211) and two inner rings (202, 212) integrated therewith corresponding to the outer and inner annular members (11, 12), two pairs of slots (203, 213) respectively defined at opposite sides thereof corresponding to the winding slot (14) of the yoke (10), and two pairs of openings (204, 214) respectively defined at opposite sides of the outer rings (201, 211) corresponding to the cut-outs (14);

whereby after the upper and lower insulators (20, 21) are respectively assembled on upper and lower ends of the yoke (10), wires of stator coils are respectively wound around the upper and lower insulators (20, 21) and bind the upper and lower insulators (20, 21) together with the yoke (10).

2. The stator as claimed in claim 1, wherein upper ends of the outer rings (201) and inner rings (202) of the upper insulator (20) are respectively formed with bulged outer edges (205) around outer sides thereof and bulged inner edges (206) around inner sides thereof, lower ends of the outer rings (211) and inner rings (212) of the lower insulator (21) are respectively formed with bulged outer edges (215) around outer sides thereof and bulged inner edges (216) around inner sides thereof, the lower ends of the

1 slots (203) and upper ends of the slots (213) are respectively formed with bulged joint
2 edges (207, 217) therearound, whereby the upper and lower insulators (20, 21) are
3 respectively assembled on the yoke (13) by means of the joint edges (207, 217)
4 respectively inserted into the corresponding winding slot (14) of the yoke (10).

5 3. The stator as claimed in claim 1, wherein two joint keys (30) are respectively
6 fixed into the two cut-outs (14) of the yoke (10).

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